

Trade and Industrial Education
Course: Principles of Manufacturing
Course Code # 5781
1 Credit

School Year _____

Term: ___ Fall ___ Spring

Student:	Grade:
Teacher:	School:
Number of Competencies in Course: 24	
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

STANDARD 1.0: Students will analyze the components of a manufacturing system.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Analyze the systems common to manufacturing organizations.			
1.2	Evaluate the role of customers in the manufacturing process.			

STANDARD 2.0: Students will adapt processes to meet customer needs using quality principles.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Assess the effects of quality assurance on manufacturing processes.			
2.2	Analyze the relationship between process management and quality assurance.			

STANDARD 3.0: Students will access, test, record, organize and evaluate information typical of a manufacturing workplace.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Access and process data commonly used in manufacturing.			
3.2	Test data relevant to manufacturing processes.			
3.3	Record data relevant to manufacturing processes.			
3.4	Organize data relevant to manufacturing processes.			
3.5	Evaluate data relevant to manufacturing processes.			

STANDARD 4.0: Students will analyze the fundamental organizational components of manufacturing organizations.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Analyze organizational designs and structures.			
4.2	Analyze organizational systems and processes.			
4.3	Assess the role of personal accountability within an organization.			

STANDARD 5.0: Students will analyze the fundamental economic components and functions of manufacturing organizations.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Analyze the basic economic principles that impact manufacturing operations.			
5.2	Draw conclusions and make inferences from company financial statements.			
5.3	Contrast the costs of preventive maintenance and safety practices with the costs of equipment repair and workplace accidents.			

STANDARD 6.0: Students will implement quality and statistical process control procedures to ensure and improve quality in manufacturing processes.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Analyze the contributing factors to an industrial process.			
6.2	Use statistical process control concepts to evaluate and modify manufacturing processes.			

STANDARD 7.0: Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Exhibit positive leadership skills.			
7.2	Participate in SkillsUSA-VICA as an integral part of classroom instruction.			
7.3	Assess situations and apply problem-solving and decision-making skills to particular client relations in the community, and workplace.			
7.4	Demonstrate the ability to work cooperatively with others in a professional setting.			

Students will perform safety examinations and maintain safety records.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
Safety1	Pass with 100 % accuracy a written examination relating to safety issues.			
Safety2	Pass with 100% accuracy a performance examination relating to safety.			
Safety3	Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.			

Additional Comments _____